

ABSTRACT

5 An expandable medical device has a plurality of elongated struts joined
together to form a substantially cylindrical device which is expandable from a
cylinder having a first diameter to a cylinder having a second diameter. At least
10 one of the plurality of struts includes at least one opening extending at least
partially through a thickness of said strut. A beneficial agent is loaded into the
opening within the strut in layers to achieve desired temporal release kinetics of
the agent. Alternatively, the beneficial agent is loaded in a shape which is
configured to achieve the desired agent delivery profile. A wide variety of
10 delivery profiles can be achieved including zero order, pulsatile, increasing,
decrease, sinusoidal, and other delivery profiles.